Distribution Integrity Management Program (DIMP)

Operator of Gas Distribution System

Mt Carmel Public Utility Co

Operator ID: **12858**
Operator: **MT CARMEL PUBLIC UTILITY CO**
Address: **316 N MARKET ST, MOUNT CARMEL, IL 62863**
(618) 262-5151

Inspection ID: **22**
Report Date: **6/27/2014**
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States(s) included in this Inspection:

Agency Representatives:
James Watts, Illinois Commerce Commission, 2174149609, jwatts@icc.illinois.gov

Persons Interviewed:
Sellers A Joseph, Gas Superintendent, 6182625212, jsellers@mtpcu.com

Inspector Comments:

Q. No.:	Rule Name:	Question	Answer	Details	Comments
1	192.1005				
		Was the plan written and implemented per the requirement of 192.1005 by 08/02/2011? OR For a gas system put into service or acquired after 08/02/2011, was a plan written and implemented prior to beginning of operation?	Yes or Satisfactory	The initial plan indicates the DIMP plan was implemented by 8-2-2011.	The initial plan indicates the DIMP plan was implemented by 8-2-2011.
2	Information Only				
		Were commercially available product(s)/templates used in the development of the operator's written integrity management plan?	Yes or Satisfactory	SHRIMP was utilized to establish the DIMP plan.	SHRIMP was utilized to establish the DIMP Plan.
		Commercial product(s)/templates name if used:	Fully	SHRIMP	
3	Information Only				
		Does the operator's plan assign responsibility, including titles and positions, of those accountable for developing and implementing required actions?	Yes or Satisfactory	This is defined in Chapter 1 on page 1 of the plan.	The Gas Superintendent is the responsible party for Mt. Carmel Public Utility.

Q. No.:	Rule Name:	Question	Answer	Details	Comments
4	192.1007(a)(1)	Do the written procedures identify or reference the appropriate sources used to determine the following characteristics necessary to assess the threats and risks to the integrity of the pipeline:			
		Defined in Chapter 3 inserted pipe, rehabilitated pipe method, materials, sizes, dates of installation, mains and services, etc.)?	Design (e.g. type of construction, The above are defined	under Knowledge of the System on pages 3-5.	Yes or Satisfactory in Chapter 3 or in documents associated with the work or survey performed.
		Operating Conditions (e.g. pressure, gas quality, etc.)?	Yes or Satisfactory	Defined in Chapter 3 under Knowledge of the System on pages 3-5.	
		Operating Environmental Factors (e.g. corrosive soil conditions, frost heave, land subsidence, landslides, washouts, snow damage, external heat sources, business districts, wall-to-wall paving, population density, difficult to evacuate facilities, valve placement, etc.)?	Yes or Satisfactory	These are defined on maps and leak survey maps, patrol forms and leak survey and continuing surveillance documentation.	
5	192.1007(a)(2)				
		Do the written procedures require the consideration of information gained from past design, operations, and maintenance (e.g. O&M activities, field surveys, One-Call system information, excavation damage, etc.)?		Procedures defined in Chapter 7 and Chapter 10 determine the records used and to be maintained to establish system information defined in Chapter 3 under System Knowledge.	Review of records retained by the operator indicate they have utilized the available information to establish the system information defined in Chapter 3.
6	Information Only				
		Do the written procedures indicate if the information was obtained from electronic records, paper records, or subject matter expert knowledge (select all which apply)? Electronic, Paper, SME	Electronic - Paper - SME	These are defined in Chapter 1 Scope on page 1, Chapter 3 System Knowledge on pages 3-5 and in 4.1 under Overview for Threat Assessment on page 6.	The operator is using paper and electronic documentation, SME and is currently establishing a GIS system for mapping and system information retention. They are also using external sources such as PHMSA, American Public Gas Association ("APGA") and American Gas Association ("AGA").

Q. No.:	Rule Name:	Question	Answer	Details	Comments
7	192.1007(a)(3)	Does the plan contain written procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?	Yes or Satisfactory	No gaps were identified during the reviews performed as defined in 11.1 C on page 30. If additional information is learned, it will be incorporated into the plan.	No gaps were identified and is defined in 11.1 C on page 30. If additional information is learned, it will be incorporated into the plan.
8	192.1007(a)(3)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?	Not Applicable	There were no indications of gaps identified during the establishment of the plan. This is defined in 11.1 C on page 30. As new information is learned it will be included in the plan.	There were no indications of gaps identified during the establishment of the plan. This is defined in 11.1 C on page 30. As new information is learned it will be included in the plan.
9	192.1007(a)(3)	Do the written procedures specify the means to collect the additional information needed to fill gaps due to missing, inaccurate, or incomplete records (e.g., O&M activities, field surveys, One-Call System, etc.)?	Yes or Satisfactory	Defined in 11.1 © on page 30.	No gaps were initially identified. If new information is learned it will be incorporated into the DIMP plan.
10	192.1007(a)(5)	Do the written procedures require the capture and retention of data on any new pipeline installed?	Yes or Satisfactory	Defined in Chapter 3 and in the O&M.	
11	192.1007(a)(5)	Does the data required for capture and retention include, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?		Yes or Satisfactory (1) on page 26.	Defined in 11.1 (a)
12	192.1007(a)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Does the documentation provided by the operator demonstrate implementation of the element “Knowledge of the System”?	Yes or Satisfactory	Knowledge of the system is defined in Chapter 3 on pages 3-5 and Staff reviewed the maps utilized by Mt Carmel. They also indicated they are in the process of implementing a GIS system to be utilized to indicate the location of their piping and retain certain system information.	Knowledge of the system is defined in Chapter 3 on pages 3-5 and Staff reviewed the maps utilized by Mt Carmel. They also indicated they are in the process of implementing a GIS system to be utilized to indicate the location of their piping and retain certain system information.
13	192.1007(a)				
		Has the operator demonstrated an understanding of its system?	Yes or Satisfactory	This is defined in Chapter 3 on pages 3-5.	This is defined in Chapter 3 on pages 3-5.
14	192.1007(b)	In identifying threats, do the written procedures include consideration of the following categories of threats to each gas distribution pipeline?			
		Corrosion	Yes or Satisfactory	Defined in Chapter 4 in 4.2.1 on pages 6-8.	The above threats are considered in Chapter 4 Threat Assessment. These will be reviewed after SHRIMP revisions are completed later in 2014 to see if any of these have changes due to the program revisions being completed in SHRIMP by SIF.
		Natural Forces	Yes or Satisfactory	Defined in Chapter 4 in 4.2.6 on page 11.	
		Excavation Damage	Yes or Satisfactory	Defined in Chapter 4 in 4.2.3 on pages 9-10.	
		Other Outside Force Damage	Yes or Satisfactory	Defined in Chapter 4 in 4.2.7 on page 11.	
		Material or Welds	Yes or Satisfactory	Defined in Chapter 4 in 4.2.5 on pages 10-11.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Equipment Failure	Yes or Satisfactory	Defined in Chapter 4 in 4.2.2 Equipment Malfunctions on pages 8-9.	
		Incorrect Operation	Yes or Satisfactory	Defined in Chapter 4 in 4.2.4 on page 10.	
		Other Concerns	Yes or Satisfactory	Defined in Chapter 4 in 4.2.8 on pages 11-12.	
15	192.1007(b)				
		Did the operator consider the information that was reasonably available to identify existing and potential threats?	Yes or Satisfactory	Defined in Chapter 4 under Threat Assessment on pages 6-12.	Defined in Chapter 4 under Threat Assessment on pages 6-12.
16	Information Only				
		Does the plan subdivide the primary threats into subcategories to identify existing and potential threats?	Yes or Satisfactory	Corrosion and Excavation Damage, Equipment Malfunctions, Incorrect Operations, Material welds or Joints is currently subdivided into subcategories. Corrosion uses external, internal and atmospheric as categories. Excavation uses	
17	192.1007(b)				
		Incident and leak history	Yes or Satisfactory	Is reviewed and is defined in Chapter 4.1 on page 6. There have been no reportable incidents in the Mt. Carmel system.	
		Corrosion control records	Yes or Satisfactory	Staff reviewed three years of corrosion records and indicates corrective actions were taken on deficient potential levels identified during the surveys conducted.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Continuing surveillance records	Yes or Satisfactory	Staff reviewed the patrolling records damage prevention and continuing surveillance documentation.	
		Patrolling records	Yes or Satisfactory	Staff reviewed the patrolling records and found they were conducted as required and found no issues. The patrols were documented as required and are used to determine if conditions have changed that may warrant changes in the DIMP plan.	
		Maintenance history	Yes or Satisfactory	Staff reviewed the leak surveys, leak repairs and leak rechecks on class three leaks.	
		Excavation damage experience	Yes or Satisfactory	There have been approximately 3 damages in the last five years and were attributed to the excavator not using JULIE or failing to expose prior to excavation to ensure clear. Review of JULIE tickets indicates they respond to JULIE's as required and mark the facilities as required. If clear they contact the excavator and mark clear. When excavation is in close proximity to their system they are present during the excavation.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Other – Describe	Yes or Satisfactory	No other threats were identified under this classification.	
		In identifying threats did the information considered include any of the following?	Yes or Satisfactory		
18	Information Only				
		Does the plan categorize primary threats as either “system-wide” or “localized”?	All System-wide	Due to the bare or isolated service piping being scattered throughout their systems, they leak survey all of the systems on a three year interval. There are no localized threats.	Due to the bare or isolated service piping being scattered throughout their systems, they leak survey all of the systems on a three year interval. There are no localized threats.
19	Information Only				
		Do the written procedures consider, in addition to the operator’s own information, data from external sources (e.g. trade associations, government agencies, or other system operators, etc.) to assist in identifying potential threats?	Yes or Satisfactory	This is defined in Chapter 4.1 on page 6.	The operator uses additional information from the operator, PHMSA and other governmental agencies, trade associations and other operators to aid in identifying threats.
20	192.1007(b)				
		Does the documentation provided by the operator demonstrate implementation of the element “Identify Threats”?	Yes or Satisfactory	Defined in 11.2 of Chapter 11 on pages 30-57.	
21	Information Only				
		Was the risk evaluation developed fully or in part using a commercially available tool? Commercial tool name if used:	Fully	SHRIMP was utilized by Mt. Carmel to conduct the risk evaluations.	SHRIMP was utilized by Mt. Carmel to conduct the risk evaluation. This is defined in 11.2.
22	192.1007(c)				
		Do the written procedures contain the method used to determine the relative importance of each threat and estimate and rank the risks posed? Briefly describe the method.	Yes or Satisfactory	The relative risk model is defined in 11.3.2 on pages 65-69.	The relative risk model is defined in 11.3.2 on pages 65-69.

Q. No.:	Rule Name:	Question	Answer	Details	Comments
23	192.1007(c)	Do the written procedures to evaluate and rank risk consider: Each applicable current and potential threat?			
		Corrosion	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	This is defined in 11.3.1 on page 59 using the threat interviews in SHRIMP to establish the applicable threats.
		Natural Forces	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Excavation Damage	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Other Outside Force Damage	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Material or Welds	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Equipment Failure	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Incorrect Operation	Yes or Satisfactory	This is defined in 11.3.1 on page 59.	
		Other Concerns	Yes or Satisfactory	This is defined in 11.3.1 on page 59 but there were no other threats identified.	
24	192.1007(c)	Do the written procedures to evaluate and rank risk consider: The likelihood of failure associated with each threat?			
		Corrosion	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	Likelihood and consequence are addressed and consider both the likelihood and consequence for their a specific threat in their systems.
		Natural Forces	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
		Excavation Damage	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Other Outside Force Damage	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
		Material or Welds	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
		Equipment Failure	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
		Incorrect Operation	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
		Other Concerns	Yes or Satisfactory	This is defined in #4 of 11.3.1 on pages 59-60.	
25	192.1007(c)	Do the written procedures to evaluate and rank risk consider: The potential consequence of such a failure?			
		Corrosion	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	SHRIMP evaluates the potential for failure of the above threats. Other Concerns was not utilized by the operator.
		Natural Forces	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Excavation Damage	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Other Outside Force Damage	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Material or Welds	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Equipment Failure	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Incorrect Operation	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
		Other Concerns	Yes or Satisfactory	Defined in 11.3.1 on pages 57-65.	
26	192.1007(c)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		If subdivision of system occurs, does the plan subdivide the system into regions with similar characteristics and for which similar actions are likely to be effective in reducing risk? Briefly describe the approach.	Not Applicable	Subdivision was not utilized by Mt. Carmel as there are no threats that are localized in the system. This is defined in 8 C of 11.3.1 on pages 62-63.	Subdivision was not utilized by Mt. Carmel as there are no threats that are localized in the system. Isolated services or bare steel piping is scattered throughout the system and the bare steel services and main is limited to the town of Mt. Carmel.
27	Information Only				
		Is the method used to evaluate and rank risks reasonable?	Yes or Satisfactory	This is defined in C of 11.3.1 on pages 62-63.	SHRIMP utilizes a reasonable method to evaluate and rank risk. SHRIMP assigns a numeric weighting to the answers provided by Mt. Carmel when entering information into SHRIMP.
28	192.1007(c)				
		Are the results of the risk ranking supported by the risk evaluation model/method?	Yes or Satisfactory	SHRIMP uses an acceptable risk evaluation model that is defined in 11.3.1 on pages 59-60.	
29	192.1007(c)				
		Did the operator validate the results generated by the risk evaluation model/method? Briefly describe.	Yes or Satisfactory	Staff reviewed the risk ranking located in 11.4.2 on pages 70-74.	Mt. Carmel identified the applicable threats using SHRIMP.
30	192.1007(c)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Does the documentation provided by the operator demonstrate implementation of the element “Evaluate and Rank Risk”?	Yes or Satisfactory	The documentation provided by Mt. Carmel demonstrates implementation of evaluate and rank risk. They have good records on the location of bare steel main and services, individually protected isolated services and risers. They retain documentation of corrective actions taken to correct deficiencies identified during system maintenance, surveys and patrols.	
31	192.1007 (d)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Does the plan include procedures to identify when measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk?	Yes or Satisfactory	Defined in 11.4.2 on pages 70-74.	Increased the number locations where line marker signs are placed on the high pressure system. Will conduct leak surveys in areas where excavation damage has occurred. They install warning tape on installations where piping is installed using direct bury procedures. The monitor backfill where third party excavation has exposed their facilities to ensure adequate support is provided to lessen the affects of settlement. They perform cathodic potential testing each time they work on steel or isolated steel piping to ensure adequate cp is being maintained. Placed line markers near locations where vacant risers are located.
32	192.1007 (d)				
		When measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk, does the plan identify the measures selected, how they will be implemented, and the risks they are addressing?	Yes or Satisfactory	Defined in 11.4.2 on pages 70-74.	Conduct leak surveys after third party damage and they have installed more signs on the high pressure pipeline to attempt to prevent third party damage.
34	192.1007 (d)				
		Locate the leaks in the distribution system;	Yes or Satisfactory	Defined in 6.1 on page 18 which references the O&M Section 9.0 through 9.5.7.	
		Evaluate the actual or potential hazards associated with these leaks;	Yes or Satisfactory	Defined in 6.1 of Chapter 6 on pages 15-18.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Act appropriately to mitigate these hazards;	Yes or Satisfactory	Defined in 6.1 of Chapter 6 on pages 15-18.	
		Keep records;	Yes or Satisfactory	Defined in Chapter 7 on 7.1 on page 20.	
		Self-assess to determine if additional actions are necessary to keep people and property safe.		Defined in Chapter 7 in 7.1 on pages 15-18 and in 7.1 on page 20.	
		Does the plan include an effective leak management program (unless all leaks are repaired when found)	Yes or Satisfactory	Defined in 6.1	7.1 requires retaining the number of leaks eliminated or repaired. The leak survey results indicate the number of leaks detected and remaining unrepaired.
35	192.1007 (d)				
		Does the documentation provided by the operator demonstrate implementation of the measures, required by Part 192 Subpart P, to reduce risk?	Yes or Satisfactory	Leak surveying bare on a three year cycle, installed more signage on the high pressure pipeline to attempt to prevent third party damage.	The operator is repairing by replacement on piping that has older outstanding class three leaks on bare piping rather than monitoring as allowed by company procedures.
36	192.1007 (e)	Does the plan contain written procedures for how the operator established a baseline for each performance measure?			
		i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	The operator is retaining the above information for reporting on the annual DOT report and to update SHRIMP.
		ii) Number of excavation damages?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	
		iii) Number of excavation tickets received by gas department?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	
		iv) Total number of leaks either eliminated or repaired categorized by cause?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		v) Number of hazardous leaks either eliminated or repaired, categorized by material?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	
		vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the IM program in controlling each identified threat?	Yes or Satisfactory	Defined in 11.3 E on page 64 of the plan.	
37	192.1007 (e)	Does the plan establish a baseline for each performance measure?			
		i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	F of 11.3 defines how the baseline is established for performance measures.
		ii) Number of excavation damages?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	
		iii) Number of excavation tickets received by gas department?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	
		iv) Total number of leaks either eliminated or repaired categorized by cause?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	
		v) Number of hazardous leaks either eliminated or repaired, categorized by material?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	
		vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the IM program in controlling each identified threat?	Yes or Satisfactory	Defined in 11.3 E on page 64 and in F on pages 64-65.	
38	192.1007 (e)	Does the operator have written procedures to collect the data for each performance measure?			
		i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	Yes or Satisfactory	Defined in 7.1 on page 20.	Review of leaks survey results, leak recheck / repair documentation and excavation damage and completed locate documentation indicate they are retaining and collecting the required information to monitor results and measure performance.

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		ii) Number of excavation damages?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		iii) Number of excavation tickets received by gas department?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		iv) Total number of leaks either eliminated or repaired categorized by cause?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		v) Number of hazardous leaks either eliminated or repaired, categorized by material?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the IM program in controlling each identified threat?	Yes or Satisfactory	Defined in 7.1 on page 20.	
39	192.1007 (e)	Do the written procedures require the operator to monitor each performance measure?			
		i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	Yes or Satisfactory	Defined in 7.1 on page 20.	Review of leaks survey results, leak recheck / repair documentation and excavation damage and completed locate documentation indicate they are retaining and collecting the required information to monitor results and measure performance.
		ii) Number of excavation damages?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		iii) Number of excavation tickets received by gas department?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		iv) Total number of leaks either eliminated or repaired categorized by cause?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		v) Number of hazardous leaks either eliminated or repaired, categorized by material?	Yes or Satisfactory	Defined in 7.1 on page 20.	
		vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the IM program in controlling each identified threat?	Yes or Satisfactory	Defined in 7.1 on page 20.	
40	192.1007 (e)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		When measures are required to reduce risk, do the written procedures provide how their effectiveness will be measured?	Yes or Satisfactory	Defined in Chapter 8 on page 22.	Chater 8 is periodic evaluation and improvement and requires an annual evaluation of the items collected in Chapter 7.
41	Information Only				
		Can the performance measures identified by the operator in the plan be counted, monitored, and supported?	Yes or Satisfactory	The items required to be collected in Chapter 7, can be counted, monitored and supported.	The items required to be collected in Chapter 7, can be counted, monitored and supported.
42	192.1007 (e)				
		Does the documentation provided by the operator demonstrate implementation of the element “Measure Performance, Monitor Results, and Evaluate Effectiveness”?	Yes or Satisfactory	Review of annual reports, leaks, leak repairs and third party damages / completed locates demonstrate the element of measure performance, monitor results and evaluate effectiveness.	Review of annual reports, leaks, leak repairs and third party damages / completed locates demonstrate the element of measure performance, monitor results and evaluate effectiveness.
43	192.1007 (f)	Do the written procedures for periodic review include:			
		a. Frequency of review based on the complexity of the system and changes in factors affecting the risk of failure, not to exceed 5 years?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		b. Verification of general information (e.g. contact information, form names, action schedules, etc.)?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		c. Incorporate new system information?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		d. Re-evaluation of threats and risk?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		e. Review the frequency of the measures to reduce risk?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		f. Review the effectiveness of the measures to reduce risk?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		g. Modify the measures to reduce risk and refine/improve as needed (i.e. add new, modify existing, or eliminate if no longer needed)?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
		h. Review performance measures, their effectiveness, and if they are not appropriate, refine/improve them?	Yes or Satisfactory	Defined in Chapter 8 on page 22 and in F of 11.3.1 on pages 64-65.	
44	Information Only	Does the plan contain a process for informing the appropriate operating personnel of an update to the plan?	Yes or Satisfactory	Defined in Chapter 8 in Periodic Evaluation and Improvement on page 22.	
45	Information Only	Does the plan contain a process for informing the appropriate regulatory agency of a significant update to the plan?	Yes or Satisfactory	Defined in Chapter 9 on pages 23-24.	Mt. Carmel has provided plan revisions to the Commission as required.
46	192.1007 (f)	Does the documentation provided by the operator demonstrate implementation of the element "Periodic Evaluation and Improvement"?	Yes or Satisfactory	Defined in Plan Version History located on page IV in the front of the plan.	Defined in Plan Version History located on page IV in the front of the plan.
47	192.1007 (g)	Does the plan contain or reference procedures for reporting, on an annual basis, the four measures listed in 192.1007(e)(1)(i) through (e)(1)(iv) to PHMSA as part of the annual report required by § 191.11 and the State regulatory authority?	Yes or Satisfactory	Defined in Chapter 9 of the plan on pages 23-24.	Staff reviewed three years of annual reports and observed the four performance measure items are being reported to PHMSA as required.
48	Information Only	When required by the State, does the plan identify the specific report form, date, and location where it is to be submitted?	Yes or Satisfactory	The ICC address is located in Chapter 9 of the plan on pages 23-24.	
49	192.1007 (g)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Has the operator submitted the required reports?	Yes or Satisfactory	Mt. Carmel has submitted their DIMP plans as required to the ICC.	
50	192.1009				
		Does the operator have written procedures to collect the information necessary to comply with the reporting requirements of 192.1009?	Yes or Satisfactory	Defined in Chapter 9 on pages 23-24.	There have been no mechanical fitting failures that have resulted in a hazardous leak. Due to this no reports have been required to be submitted.
51	192.1011				
		Does the operator have written procedures specifying which records demonstrating compliance with Subpart P will be maintained for at least 10 years?	Yes or Satisfactory	Defined in Chapter 10 on page 25.	The records are required to be retained for 10 years.
52	192.1011				
		Does the operator have written procedures specifying that copies of superseded integrity management plans will be maintained for at least 10 years?	Yes or Satisfactory	This is defined in Chapter 10 on page 25.	Staff confirmed that Mt. Carmel is maintaining copies of previous versions of the DIMP plan. The requirement is for a minimum of 10 years.
53	192.1011				
		Has the operator maintained the required records?	Yes or Satisfactory	Records and retention intervals are defined in Chapter 10 on page 25. The records required are defined in Chapter 7 Measure performance, Monitor Results and Evaluate Effectiveness and in 11.2 for Data Sources.	Staffs review determined that Mt. Carmel is maintaining the required records to establish threats, monitor results and evaluate effectiveness. Staff reviewed patrolling, leak survey, leak repair, locate records, regulator inspection, piping inspection reports and cathodic protection testing documents.
54-1	192.1007 (d)	1. For the top five highest ranked risks from the operator's risk ranking list the following:			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);	Corrosion		Review of laeka repair records indicate Mt. Carmel is replacing bare piping when leakage is detected.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);		External corrosion on bare non-cathodically protected piping Services and Main.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);		Replace bare piping when leakage occurs rather than reapiring and leaving in service.	
		Associated performance measure.		Reduce the number of leaks and remove bare piping from the system.	
54-2	192.1007 (d)	2. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);	Material or weld or joint failure		These are steel compression couplings that were installed to repair third party damage on pe service lines. No cathodic protection was installed on these fitting when they were installed.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);	Mechanical Fittings Couplings)	Steel compression (compression piping that were not cathodically protected after being installed.	couplings in PE
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);		Mt. Carmel replaces when they are found during work or if leaking.	
		Associated performance measure.		Reduce the probability of leakage due to corrosion.	
54-3	192.1007 (d)	3. For the top five highest ranked risks from the operator's risk ranking list the following:			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material	Excavation damage		Mt. Carmel does stand by on excavations that are taking place near
facilities	Staff	or weld, equipment failure, incorrect operation, and other concerns);			reviewed inspection reports that were completed when inspections were conducted.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);	Failure to notify	Failure of excavator to follow damage prevention laws.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);		Monitor excavations that are taking place in close proximity to Mt. Carmel gas facilities.	
		Associated performance measure.		Reduce the probability of third party damage and leakage.	
54-4	192.1007 (d)	4. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);	Corrosion		Review of atmospheric corrosion surveys and corrective actions indicate they are taking corrective actions when coating issues or corrosion is observed during the three year survey or that were identified by their meter readers.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);	Atmospheric		

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);		Mt. Carmel is using a different type of coating on risers to lessen the probability of damage or coating disbonding. Above ground main installations are inspected annually for atmospheric corrosion during system patrols.	
		Associated performance measure.		Reduce the probability of corrosion or subsequent leakage.	
54-5	192.1007 (d)	5. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);	Natural forces		
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);	Other	Icing of regulator vents.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);		Mt Carmel has installed or positioned regulator station regulator vents in a direction to lessen the probability of icing or accumulation of liquids. Larger vent shields have been installed in areas where icing has been observed on service regulators. Meter readers are to watch for instances where icing may be an issue.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Associated performance measure.		Reduce the probability of an atmospheric vent being blocked by ice accumulations.	